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| 10/029,827                                | 12/27/2001      | Kwok Pun Lee         | US010652                | 5531             |  |
| 24737 75                                  | 590 11/08/2004  |                      | EXAM                    | INER             |  |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS |                 |                      | RIES, LAURIE ANNE       |                  |  |
| P.O. BOX 3001<br>BRIARCLIFF 1             | MANOR, NY 10510 |                      | ART UNIT PAPER NUMBER   |                  |  |
|   |                 |                      | 2176                    |                  |  |
|   |                 |                      | DATE MAILED: 11/08/2004 | 4                |  |

Please find below and/or attached an Office communication concerning this application or proceeding.



|  |  | Application No.  | Applicant(s)   | <del></del> |  |  |  |
|--|--|--|--|-------------|--|--|--|
| Office Action Summary  |  | 10/029,827   | LEE, KWOK PUN  | 1           |  |  |  |
|  |  | Examiner   | Art Unit   |             |  |  |  |
|  |  | Laurie Ries  | 2176   | *           |  |  |  |
| The MAILING DATE   | of this communication  |  | et with the correspondence address   |             |  |  |  |
| Period for Reply   |  | •  | ·  |             |  |  |  |
| <ul> <li>If NO period for reply is specified a</li> <li>Failure to reply within the set or ex</li> </ul>   | THIS COMMUNICATION THE COMMUNI | ON. R 1.136(a). In no event, however, m . reply within the statutory minimum or downling and will expire SIX (6) | ay a reply be timely filed  of thirty (30) days will be considered timely.  MONTHS from the mailing date of this communicate the communicate of the communicate (35 U.S.C. § 133). | cation.     |  |  |  |
| Status   |  |  |  |             |  |  |  |
| 1) Responsive to com   | munication(s) filed on 2   | 7 December 2001.   |  |             |  |  |  |
| 2a) This action is FINAL   |  |  |  |             |  |  |  |
| 3) Since this application  | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |  |             |  |  |  |
| closed in accordance   | e with the practice und  | er Ex parte Quayle, 1935   | C.D. 11, 453 O.G. 213.   |             |  |  |  |
| Disposition of Claims  |  | · · ·  |  |             |  |  |  |
| 4)⊠ Claim(s) <u>1-15</u> is/are<br>4a) Of the above cla<br>5)□ Claim(s) is/a<br>6)⊠ Claim(s) <u>1-15</u> is/are<br>7)□ Claim(s) is/a<br>8)□ Claim(s) are           | im(s) is/are with<br>re allowed.<br>rejected.<br>re objected to.   | drawn from consideration   | ,  |             |  |  |  |
| Application Papers   |  |  |  |             |  |  |  |
| 9) ☐ The specification is o  | objected to by the Exam  | niner.   |  |             |  |  |  |
|  | · · · · · · · · · · · · · · · · · · ·  |  | bjected to by the Examiner.  |             |  |  |  |
| •  | • •  |  | eyance. See 37 CFR 1.85(a).  | 04/4)       |  |  |  |
| '  | • • •  | •  | wing(s) is objected to. See 37 CFR 1.1<br>ched Office Action or form PTO-15  | , ,         |  |  |  |
| Priority under 35 U.S.C. § 1   | 19   |  |  |             |  |  |  |
| <ul><li>2. Certified copi</li><li>3. Copies of the application from</li></ul>  | c) None of: es of the priority docum es of the priority docum certified copies of the om the International Bu  | nents have been received nents have been received  | in Application No een received in this National Stage  | €           |  |  |  |
| Attachment(s)  |  |  |  |             |  |  |  |
| 1) Notice of References Cited (P' 2) Notice of Draftsperson's Pater 3) Information Disclosure Statem Paper No(s)/Mail Date 4/8/04.  S. Patent and Trademark Office | t Drawing Review (PTO-948  | ) Paper  | iew Summary (PTO-413)  No(s)/Mail Date e of Informal Patent Application (PTO-152) :  |             |  |  |  |

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#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "system" in line 1. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, it is assumed that claim 15 should be dependent upon claim 9 rather than claim 1.

Claim 3 contains the limitation "DICOM SR format". Where a standard, such as DICOM SR, is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. The claim scope is uncertain since the version of the standard may change and therefore cannot be used properly to identify any particular material or product. In the present case, the standard is used to identify/describe a reporting format and, accordingly, the identification/description is indefinite.

## Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims raise a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demopoulos (U.S. Patent 6,675,355 B1) in view of Clunie.

As per claim 1, Demopoulos discloses a method of providing constraints for digital images and communications including placing declarative constraint information within a declarative data block describing a document (See Demopoulos, Column 2, lines 7-19), and allowing the declarative constraint information to be processed as declarative data when the document is accessed (See Demopoulos, Abstract).

Demopoulos does not disclose expressly that the digital images and communications are in medicine. Clunie discloses digital images and communications in medicine (See Clunie, Page 3, "Headings, Findings, Images, Codes"). Demopoulos and Clunie are

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analogous art because they are from the same field of endeavor of processing electronic data using XML. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the medical information of Clunie with the method of Demopoulos. The motivation for doing so would have been to allow for fast, robust parsing of the data (See Clunie, Page 24, "Re-using Internet Tools for SR"). Therefore, it would have been obvious to combine Clunie with Demopoulos for the benefit of fast, robust parsing of the data to obtain the invention as specified in claim 1.

As per claim 2, Demopoulos and Clunie disclose the limitations of claim 1 as described above. Demopoulos also discloses that the document is an electronic document (See Demopoulos, Figure 1, element 112).

As per claim 9, Demopoulos discloses a system for specifying constraints for digital images and communications including a memory with a document in electronic form with declarative constraing instructions (See Demopoulos, Column 2, lines 7-19, and Figure 1, elements 116 and 112), and a computer processor operatively coupled with the memory and a display device, configured to execute declarative constraint instructions in the document and display the document on the display device (See Demopoulos, Abstract and Figure 1). Demopoulos does not disclose expressly that the digital images and communications are in medicine. Clunie discloses digital images and communications in medicine (See Clunie, Page 3, "Headings, Findings, Images, Codes"). Demopoulos and Clunie are analogous art because they are from the same field of endeavor of processing electronic data using XML. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the medical

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information of Clunie with the system of Demopoulos. The motivation for doing so would have been to allow for fast, robust parsing of the data (See Clunie, Page 24, "Reusing Internet Tools for SR"). Therefore, it would have been obvious to combine Clunie with Demopoulos for the benefit of fast, robust parsing of the data to obtain the invention as specified in claim 9.

As per claims 3 and 11, Demopoulos and Clunie disclose the limitations of claims 1 and 9 as described above. Clunie also discloses that the constraints are in DICOM SR format (See Clunie, Page 11, "DICOM SR Object Model"). Demopoulos and Clunie are analogous art because they are from the same field of endeavor of processing electronic data using XML. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the DICOM SR format of Clunie with the system and method of Demopoulos and Clunie. The motivation for doing so would have been to allow for trans-coding and rendering of DICOM SR content (See Clunie, Page 8, "Implementation Requirements") Therefore, it would have been obvious to combine Clunie and Demopoulos for the benefit of trans-coding and rendering DICOM SR content to obtain the invention as specified in claims 3 and 11.

As per claim 10, Demopoulos and Clunie disclose the limitations of claim 9 as described above. Demopoulos also discloses that the processor is further configured to store a declarative data block, contained within an XML file, describing the document including the decalartive constraing instructions to a data storage operated by the processor (See Demopoulos, Figure 1, elements 112, 114, and 116).

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As per claims 4 and 12, Demopoulos and Clunie disclose the limitations of claims 1 and 9 as described above. Demopoulos also discloses that the declarative data block is in Extensible Markup Language (XML). (See Demopoulos, Figure 1, element 114).

As per claims 5 and 13, Demopoulos and Clunie disclose the limitations of claims 1 and 9 as described above. Demopoulos also discloses that the constraint provided is that an element be present or required (See Demopoulos, Column 8, lines 42-45, and Column 12, Table 1)

As per claims 6 and 14, Demopoulos and Clunie disclose the limitations of claims 1 and 9 as described above. Demopoulos also discloses that the constraint provided is that an element be of a specified element type (See Demopoulos, Column 8, lines 59-63, and Column 12, Table 1)

As per claims 7 and 15, Demopoulos and Clunie disclose the limitations of claims 1 and 9 as described above. Demopoulos also discloses that the constraint provided is that two or more elements be in a specific sequence (See Demopoulos, Column 3, lines 5-8).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clunie in view of Webb (U.S. Patent 6,644,322 B2).

As per claim 8, Clunie discloses a method of providing DICOM SR constraints within an XML document, the method including creating an XML document containing DICOM SR constraints using declarative language (See Clunie, Page 29, "Limitations of XML Tools for SR") Clunie does not disclose expressly allowing a user to access the

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XML document. Webb discloses allowing a user to access an XML document (See Webb, Column 14, lines 11-17). Clunie and Webb are analogous art because they are from the same field of endeavor of processing electronic data using XML. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the accessing of the XML document of Webb with the method of Clunie. The motivation for doing so would have been to provide data portability which allows the user to transfer or export the data to another device or system (See Webb, Column 8, lines 1-15). Therefore, it would have been obvious to combine Webb with Clunie for the benefit of providing data portability to obtain the invention as specified in claim 8.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Thangaraj (U.S. Publication 2003/0208378 A1) discloses an Internet-based
  clinical trial management center that communicates with a base of users,
  participating in a clinical trial and enables the users to access and manage data,
  as well as obtain the products of data processing, according to each user's role
  in the clinical trial.
- Rothschild (U.S. Publication 2002/0016718 A1) discloses a medical image
   management system and method that uses a central data management system

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to centrally manage the storage and transmission of electronic records containing medical images between remotely located facilities.

- Gendron (U.S. Publication 2002/0023172 A1) discloses a system and method for routing medical images within a computer network.
- Dutta (U.S. Publication 2003/0037054 A1) discloses a method for controlling access to medical information.
- Behlen discloses an introduction to DICOM

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095. The examiner can normally be reached on Monday-Friday from 7:00am to 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild, can be reached at (571) 272-4090.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LR

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